

AMENDMENT TO THE CLAIMS

Replace the claims with the following rewritten listing:

1. (Currently Amended) Light illumination apparatus comprising:
 - at least one exposure head;
 - at least two light modulating arrangements,
 - each of said two light modulating arrangements comprising a spatial light modulator and an associated light emitter arranged for illumination of an illumination surface via said spatial light modulator;
 - each of said two light modulating arrangements being digitally controlled;
 - said apparatus further comprising means for performing a relative movement between said at least one exposure head and said illumination surface in at least one direction;
 - wherein the exposure head is adapted for scanning in two transverse opposite directions
2. (Previously Presented) Light illumination apparatus according to claim 1, wherein said at least two light modulating arrangements are arranged on a single exposure head.
3. (Previously Presented) Light illumination apparatus according to claim 1, wherein said relative movement is a scanning movement.
4. (Previously Presented) Light illumination apparatus according to claim 1, wherein said relative movement is established by moving the at least one exposure head relative to said illumination surface.
5. (Previously Presented) Light illumination apparatus according to claim 1, wherein said relative movement is established by moving said illumination surface relative to the at least one exposure head.

6. (Previously Presented) Light illumination apparatus according to claim 1, wherein the at least one exposure head comprises the two light modulating arrangements.
7. (Previously Presented) Light illumination apparatus according to claim 1, wherein said light modulating arrangements are arranged on at least two different exposure heads and where said exposure heads perform scanning movements over the illumination surface.
8. (Previously Presented) Light illumination apparatus according to claim 1, wherein said spatial light modulators are arranged so as to illuminate at least two substantially separate sub-areas of said illumination surface.
9. (Previously Presented) Light illumination apparatus according to claim 1, wherein said spatial light modulating arrangements are aligned so that rows of both light modulators are parallelly oriented.
10. (Previously Presented) Light illumination apparatus according to claim 1, wherein said spatial light modulating arrangements are aligned so that neighboring rows of the at least two spatial light modulators are positioned substantially so that a distance between the neighboring rows of the at least two spatial light modulators is substantially the same as a distance between rows of the individual light modulators.
11. (Previously Presented) Light illumination apparatus according to claim 1, wherein an “x-projection” of a distance between centers of at least two of the spatial light modulators is less than approximately 200 millimeters.
12. (Previously Presented) Light illumination apparatus according to claim 1, wherein a “y-projection” of a distance between centers of two of the spatial light modulators is less than approximately 50 millimeters.

13. (Previously Presented) Light illumination apparatus according to claim 1, wherein a distance between centers of two of the spatial light modulators is substantially 122.7 millimeters or 121.73 millimeters when applying SXGA and XGA, respectively.
14. (Previously Presented) Light illumination apparatus according to claim 1, wherein said exposure head comprises cooling means.
15. (Previously Presented) Light illumination apparatus according to claim 1, wherein each spatial light modulating arrangement comprises individual cooling means.
16. (Previously Presented) Light illumination apparatus according to claim 8, wherein said substantially separate sub-areas comprise neighboring surfaces of said illumination surface.
17. (Previously Presented) Light illumination apparatus according to claim 1, wherein said at least one direction is substantially transverse to a relative movement of said illumination surface.
18. (Previously Presented) Light illumination apparatus according to claim 1, wherein said at least one direction establishes that an illuminated pixel on said illumination surface is illuminated by means of a least two light modulators of said spatial light modulator.
19. (Previously Presented) Light illumination apparatus according to claim 1, wherein said at least one direction establishes that an illuminated pixel on said illumination surface is illuminated by means of at least one modulator row of said spatial light modulator.
20. (Previously Presented) Light illumination apparatus according to claim 1, wherein said exposure head is movable in at least two directions with respect to said illumination surface.

21. (Previously Presented) Light illumination apparatus according to claim 1, wherein said light emitter comprises a light source.
22. (Previously Presented) Light illumination apparatus according claim 1, wherein said light emitter comprises at least one light emitting end of an optical guide coupled to a light source.
23. (Previously Presented) Light illumination apparatus according to claim 1, wherein said light emitter comprises a lamp.
24. (Previously Presented) Light illumination apparatus according to claim 1, wherein said light emitter comprises an a LED matrix.
25. (Previously Presented) Light illumination apparatus according to claim 1, wherein said spatial light modulator comprises a DMD chip.
26. (Previously Presented) Light illumination apparatus according to claim 1, wherein said spatial light modulator comprises a micro-mechanical transmissive light modulator.
27. (Previously Presented) Light illumination apparatus according to claim 1, wherein said illumination surface comprises a printing plate.
28. (Previously Presented) Light illumination apparatus according to claim 1, wherein said illumination surface comprises a light sensitive material.
29. (Cancelled).
30. (Previously Presented) Light illumination apparatus according to claim 1, wherein an x-direction between centers of the spatial light modulating arrangement is less than 150 mm.

31. (Previously Presented) Light illumination apparatus according to claim 30, wherein the x-direction between centers of the spatial light modulating arrangement is substantially.

32. – 34. (Cancelled).

35. (Previously Presented) Method of illuminating an illumination surface, whereby the illumination is performed by a light illumination apparatus according to claim 1.